# A Cognitive Model for Teaching Reading Comprehension

By He Ji Sheng

In the study of English, reading has often been at the center of debate among teachers and scholars. Theories about reading and numerous teaching techniques have created an awareness of the influence reading has on listening, speaking, writing, and even translating. This article presents, not linguistically but pedagogically, a fresh way for teaching reading comprehension (RC) skills to learners of a language. Part one gives the theoretical background; part two illustrates the basic steps used in this model for teaching reading comprehension; and part three discusses in general the advantages and features of this new model of teaching RC.

# The Nature of Reading and Comprehension

Reading is the process of recognition, interpretation, and perception of written or printed material. Comprehension is the understanding of the meaning of the written material and covers the conscious strategies that lead to understanding. The process of reading deals with language form, while comprehension, the end product, deals with language content.

Reading is a process of communication from the writer to the reader. It involves the recognition of letters, words, phrases, and clauses, and in some respects, it can be considered a simpler process than comprehension. Comprehension, on the other hand, is a process of negotiating understanding between the reader and the writer. It is a more complex psychological process and includes linguistic factors, such as phonological, morphological, syntactic, and semantic elements, in addition to cognitive and emotional factors. The reader receives information from the author via the words, sentences, paragraphs, and so forth, and tries to understand the inner feelings of the writer.

As in grammatical analysis, distinctions between surface structures and deep structures also exist in semantic analysis. At the surface level, meaning can be classified into two broad categories: denotative meaning and connotative meaning. Denotative meaning is the meaning of words given in the dictionary and is "integral to the essential functioning of language in a way that other types of meaning are not" (Leech 1981). Connotative meaning is the communicative value of an expression by virtue of what it refers to, over and above its purely denotative meaning. It reflects the real-world experience one associates with an expression.

In deep structure, meaning can also be divided into two categories: contextual meaning and pragmatic meaning. Unlike the surface meaning of a single word, contextual meaning is realized at the sentence level and is the meaning expressed by a sentence associated with its context. This type of meaning is not decided by the word itself but by the context in which the whole sentence functions. The pragmatic meaning is communicated in the feelings and attitudes of the writer. It is the writer's intended unspoken, or unwritten meaning. In the reading process, the understanding of this type of meaning is implicative because this type of meaning lies outside the

organization of language. It cannot be deduced from the linguistic system itself; it is realized at the functional level. Both contextual meaning and pragmatic meaning call for cognitive ability on the part of the reader. Thus, the distinction between surface structure meaning and deep structure meaning is that the former is the literal meaning while the latter is the inferential meaning.

Unfortunately, teaching RC in some schools focuses only on the surface structure level of comprehension and ignores comprehension at the deep structure level.

RC not only includes linguistic recognition and cognitive understanding (semantic comprehension at both surface and deep structure levels), but also tends to be affected by the reader's reactions to the content, which affect the reader's evaluation and appreciation, which become a part of the reader's RC. If there is no such evaluation and appreciation, comprehension will be incomplete.

With these preliminary considerations in mind, we need to attempt something new and more effective in teaching RC. The cognitive model presented here, adapted from Wallen's and Barrett's taxonomies (Wallen 1972, Brunner and Campbell 1978), is so titled because it can be applied to students of different levels and adapted to their various needs.

# **Reading Comprehension Task Activities**

The main aspects of activities associated with the cognitive model of RC strategies are described below.

#### Literal comprehension training

Training students in literal comprehension consists of using two types of tasks: recognition tasks and recall tasks. Recognition tasks require students to identify the main points in the reading selection or in exercises that use the explicit content of the reading selection. Recall tasks, on the other hand, demand that students produce from memory explicit statements from selections. Such tasks are often in the form of questions that teachers pose to students after reading the text. The difficulty level of these two tasks depends on various conditions, such as the students' linguistic abilities or needs and the number of events or incidents to be recalled. It is also believed that a recall task is more difficult than a recognition task when the two tasks deal with the same content.

Literal comprehension activities include:

- a. Recognition or recall of details: identifying or recalling such facts as the names of characters, the time a story took place, the setting of a story, or an incident described in the story.
- b. Recognition or recall of the topic sentences/main ideas: locating, identifying, or producing from memory an explicit statement or main idea from a selection
- c. Recognition or recall of sequence: recalling the order of incidents or actions explicitly stated in the material

- d. Recognition or recall of descriptions: identifying some similarities and differences in the text which are explicitly described by the author
- e. Recognition or recall of cause and effect relationships: identifying reasons for certain incidents, events, or characters' actions explicitly stated in the selection

#### Inferential comprehension training

Students demonstrate their inferential abilities when they use their personal knowledge, intuition, and imagination as a basis for conjectures or hypotheses. Inferential comprehension involves more logical thinking than literal understanding and is elicited by teachers' questions which demand thinking and imagination. Some examples of inferential tasks are:

- a. Inferring supporting details: guessing about additional facts the author might have included in the selection which would have made it more informative, interesting, or appealing
- b. Inferring the main idea: providing the main idea, theme, or moral which is not explicitly stated in the selection
- c. Inferring consequence: predicting what would happen in cause-effect relationships, or hypothesizing about alternative beginnings to a story if the author had not provided one, or predicting the ending of the story before reading it
- d. Inferring cause and effect relationships: guessing what caused a certain event and explaining the rationale
- e. Inferring character traits: hypothesizing about the nature of characters on the basis of explicit clues presented in the selection
- f. Inferring figurative language: inferring literal meaning from the author's figurative use of language

#### **Evaluation**

Students demonstrate evaluation when they make judgements about the content of a reading selection by comparing it with information provided by the teacher or authorities on the subject, or with their own experience, knowledge, or values related to the subject. Evaluation requires students to make judgements about the content of their readings based on accuracy, acceptability, worth, desirability, completeness, suitability, timeliness, quality, truthfulness, and probability of occurrence. The following are types of evaluation tasks:

- a. Objective evaluation: judging the soundness of statements or events in the reading material based on external criteria, such as supporting evidence, reasons, and logic
- b. Subjective evaluation: making judgements about the statements or events presented based on internal criteria, such as one's biases, beliefs, or preferences

- c. Judgements of adequacy or validity: judging whether the author's treatment of a subject is accurate and complete when compared to other sources on that subject
- d. Judgements about appropriateness: determining whether certain selections or parts of selections are relevant and contribute to resolving an issue or a problem
- e. Judgement of worth, desirability, or acceptability: judging the suitability of a character's actions in a particular incident based on the reader's personal values

### **Appreciation**

Appreciation deals with the psychological and aesthetic impact of the selection on the reader. It includes both knowledge of and emotional responses to literary techniques, forms, styles, and structures. Activities include the following:

- a. Personal impression: reacting to the context, events, and characters
- b. Recognition of rhetorical devices: identifying the rhetorical devices in the material and explaining their functions
- c. Reactions to the style: describing and reacting to the writer's use of language and stylistic devices
- d. Evaluation of imagery: identifying and assessing the effectiveness of the writer's sensory images

### Advantages and practical value of the model

This model is designed for language teachers who train learners in RC. It has both theoretical and practical values. The advantages and special features of this model are summarized below:

- 1. The model is applicable at various skill levels and meets different needs. For example, it can be used in teaching literal meaning and concrete facts or deep structure meaning and literature appreciation.
- 2. It can be used to help students comprehend the text from different perspectives and to understand the implications of the content.
- 3. It enables students to analyze and summarize the text as well as to distinguish arguments from supporting details.
- 4. It enhances students' memorization and speed-reading.
- 5. Because students use different modes of thinking, it develops their critical thinking and inference skills.
- 6. Finally, it improves students' organizational skills and self expression.

# **Summary**

These are the basic ideas of our cognitive theory and our way of teaching reading comprehension. Although some of the strategies or skills seem to be rather simple, they are necessary for beginners. Some of the strategies or skills seem to overlap, yet they are used for different purposes in comprehension. Finally, the model places a high demand on teachers, because good RC questions always require careful thought and preparation.

# **References**

Brunner, J. F., and J. J. Campbell. 1978. *Participating in secondary reading: A practical approach*. Englewood Cliffs, NJ: Prentice Hall.

Leech, G. 1981. Semantics, the study of meaning (2nd ed). Penguin Books.

Wallen, C. J. 1972. Competency in teaching reading. Chicago, IL: Science Research Associates.

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